

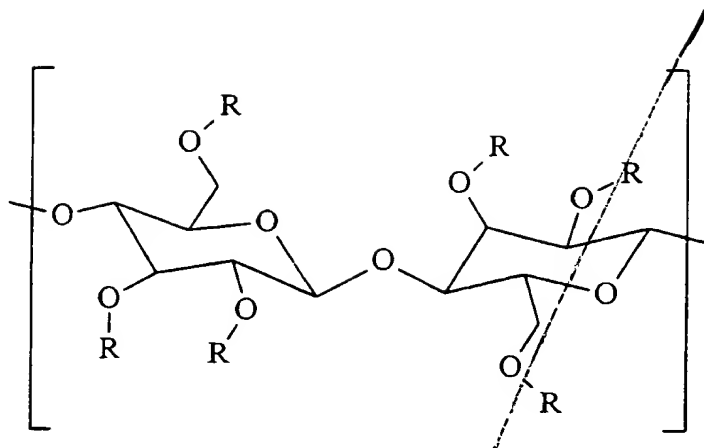
## WHAT IS CLAIMED IS:

## 1. A detergent composition characterized by:

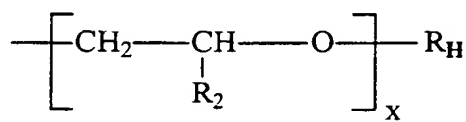
- a) from 1% to 80% by weight of surfactants selected from the group consisting of nonionic, anionic, cationic, amphoteric zwitterionic surfactants and mixtures thereof; and
- b) from 0.01% to 5.0%, preferably from 0.1% to 4.0%, by weight of a fabric enhancing component selected from the group consisting of cyclic amine based polymers, oligomers or copolymers, hydrophobically modified cellulosic based polymers or oligomers, and mixtures thereof; and

wherein the detergent composition is contained within an interior chamber of a container, the container further characterized by an exterior surface wherein the exterior surface contains a description of the composition characterized by language selected from the group consisting of: helps clothes look healthier, helps stop wear before it starts, maintains the appearance of clothes, helps prevent clothes from looking worn out, strengthens while it cleans for better looking clothes, strengthens threads so clothes look better, helps prevent clothes from looking worn, helps prevent wear and tear in the washer that can make clothes look old, helps keep clothes from aging, helps clothes come out of the washer looking as good as when they went in, helps preserve the fabric integrity of clothes, strengthens threads from the inside out for better looking clothes, extends the life of clothes, is like a vitamin for clothes, works like an anti-aging product on clothes, is like calcium for clothes, is like a supplement for clothes, after just 10 washes clothes look better than they would if you washed them with other detergents, fortifies threads for healthier looking clothes, helps prevent clothes from looking old before their time, is like stopping time for your clothes so they stay looking good.

## 2. The detergent composition of claim 1, wherein the hydrophobically modified cellulosic based polymers or oligomers are of the general formula:



wherein each R is selected from the group consisting of  $R_2$ ,  $R_C$ , and



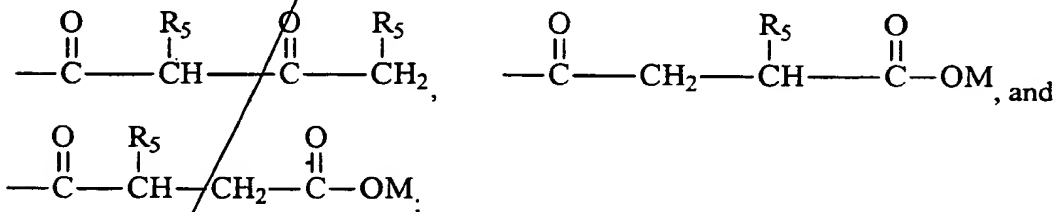
wherein:

- each  $R_2$  is independently selected from the group consisting of H and  $C_1$ - $C_4$  alkyl;

- each  $R_C$  is  $-(\text{CH}_2)_y-\overset{\text{O}}{\parallel}\text{C}-\text{OZ}$ ,

wherein each Z is independently selected from the group consisting of M,  $R_2$ ,  $R_C$ , and  $R_H$ ;

- each  $R_H$  is independently selected from the group consisting of  $C_5$ - $C_{20}$  alkyl,  $C_5$ - $C_7$  cycloalkyl,  $C_7$ - $C_{20}$  alkylaryl,  $C_7$ - $C_{20}$  arylalkyl, substituted alkyl, hydroxyalkyl,  $C_1$ - $C_{20}$  alkoxy-2-hydroxyalkyl,  $C_7$ - $C_{20}$  alkylaryloxy-2-hydroxyalkyl,  $(R_4)_2\text{N}$ -alkyl,  $(R_4)_2\text{N}$ -2-hydroxyalkyl,  $(R_4)_3\text{N}$ -alkyl,  $(R_4)_3\text{N}$ -2-hydroxyalkyl,  $C_6$ - $C_{12}$  aryloxy-2-hydroxyalkyl,



- each  $R_4$  is independently selected from the group consisting of H,  $C_1$ - $C_{20}$  alkyl,  $C_5$ - $C_7$  cycloalkyl,  $C_7$ - $C_{20}$  alkylaryl,  $C_7$ - $C_{20}$  arylalkyl, aminoalkyl, alkylaminoalkyl, dialkylaminoalkyl, piperidinoalkyl, morpholinoalkyl, cycloalkylaminoalkyl and hydroxyalkyl;

- each  $R_5$  is independently selected from the group consisting of H,  $C_1$ - $C_{20}$  alkyl,  $C_5$ - $C_7$  cycloalkyl,  $C_7$ - $C_{20}$  alkylaryl,  $C_7$ - $C_{20}$  arylalkyl, substituted alkyl, hydroxyalkyl,  $(R_4)_2N$ -alkyl, and  $(R_4)_3N$ -alkyl;

wherein:

M is a suitable cation selected from the group consisting of Na, K,  $1/2Ca$ , and  $1/2Mg$ ;

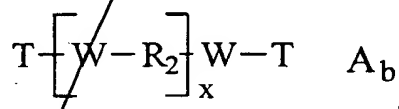
each x is from 0 to 5;

each y is from 1 to 5; and

provided that:

- the Degree of Substitution for group  $R_H$  is between 0.001 and 0.1, more preferably between 0.005 and 0.05, and most preferably between 0.01 and 0.05;
- the Degree of Substitution for group  $R_C$  wherein Z is H or M is between 0.2 and 2.0, more preferably between 0.3 and 1.0, and most preferably between 0.4 and 0.7;
- if any  $R_H$  bears a positive charge, it is balanced by a suitable anion; and
- two  $R_4$ 's on the same nitrogen can together form a ring structure selected from the group consisting of piperidine and morpholine.

3. The detergent composition of any of claims 1-2, wherein the cyclic amine based polymers, oligomers or copolymers are of the general formula:

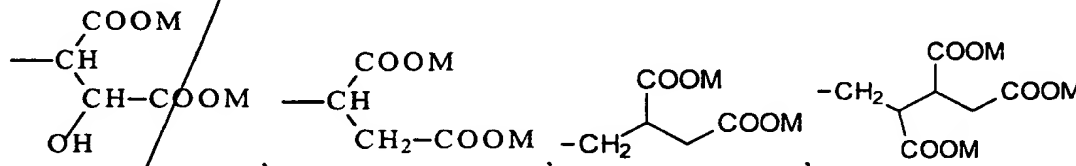


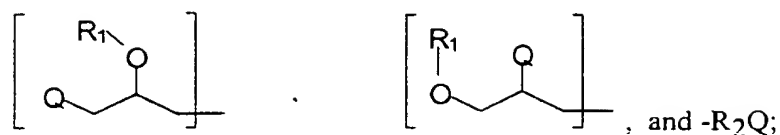
wherein;

each T is independently selected from the group consisting of H,  $C_1$ - $C_{12}$  alkyl, substituted alkyl,

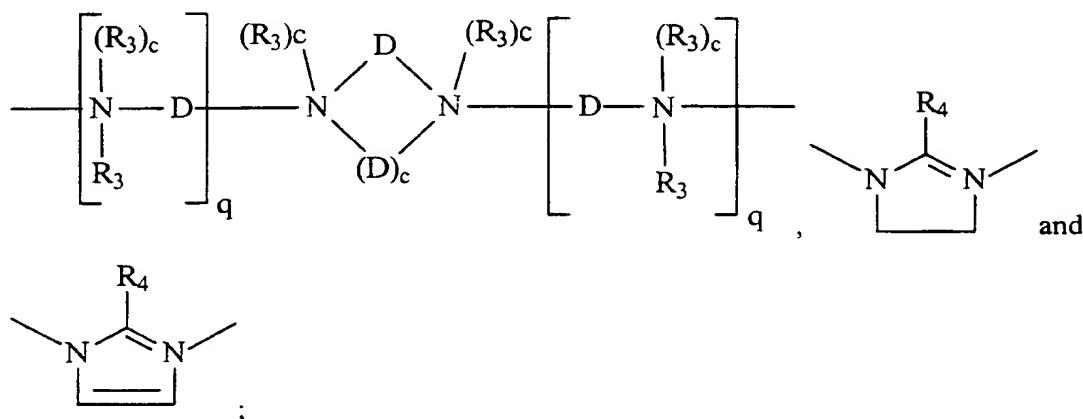
$C_7$ - $C_{12}$  alkylaryl,

$-(CH_2)_hCOOM$ ,  $-(CH_2)_hSO_3M$ ,  $CH_2CH(OH)SO_3M$ ,  $-(CH_2)_hOSO_3M$ ,

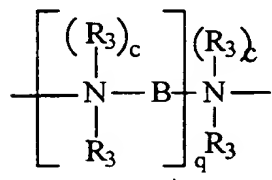




-wherein W is characterized by at least one cyclic constituent selected from the group consisting of:



in addition to the at least one cyclic constituent, W may also comprise an aliphatic or substituted aliphatic moiety of the general structure;



-each B is independently C<sub>1</sub>-C<sub>12</sub> alkylene, C<sub>1</sub>-C<sub>12</sub> substituted alkylene, C<sub>3</sub>-C<sub>12</sub> alkenylene, C<sub>8</sub>-C<sub>12</sub> dialkylarylene, C<sub>8</sub>-C<sub>12</sub> dialkylarylenediyl, and -(R<sub>5</sub>O)<sub>n</sub>R<sub>5</sub>-;

-each D is independently C<sub>2</sub>-C<sub>6</sub> alkylene;

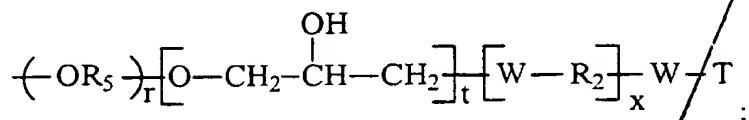
-each Q is independently selected from the group consisting of hydroxy, C<sub>1</sub>-C<sub>18</sub> alkoxy, C<sub>2</sub>-C<sub>18</sub> hydroxyalkoxy, amino, C<sub>1</sub>-C<sub>18</sub> alkylamino, dialkylamino, trialkylamino groups, heterocyclic monoamino groups and diamino groups;

-each R<sub>1</sub> is independently selected from the group consisting of H, C<sub>1</sub>-C<sub>8</sub> alkyl and C<sub>1</sub>-C<sub>8</sub> hydroxyalkyl;

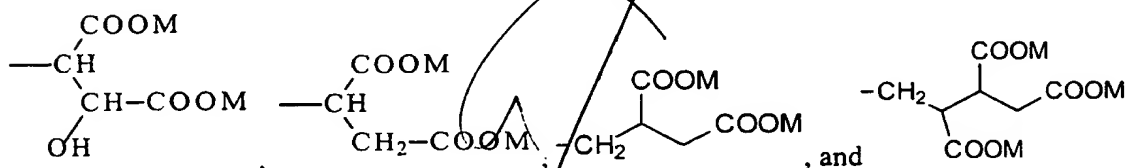
-each R<sub>2</sub> is independently selected from the group consisting of C<sub>1</sub>-C<sub>12</sub> alkylene, C<sub>1</sub>-C<sub>12</sub> alkenylene, -CH<sub>2</sub>-CH(OR<sub>1</sub>)-CH<sub>2</sub>, C<sub>8</sub>-C<sub>12</sub> alkaryl, C<sub>4</sub>-C<sub>12</sub> dihydroxyalkylene,

poly(C<sub>2</sub>-C<sub>4</sub> alkyleneoxy)alkylene. H<sub>2</sub>CH(OH)CH<sub>2</sub>OR<sub>2</sub>OCH<sub>2</sub>CH(OH)CH<sub>2</sub>-, and C<sub>3</sub>-C<sub>12</sub> hydrocarbyl moieties;

provided that when R<sub>2</sub> is a C<sub>3</sub>-C<sub>12</sub> hydrocarbyl moiety the hydrocarbyl moiety can comprise from about 2 to about 4 branching moieties of the general structure:



-each R<sub>3</sub> is independently selected from the group consisting of H, O, R<sub>2</sub>, C<sub>1</sub>-C<sub>20</sub> hydroxyalkyl, C<sub>1</sub>-C<sub>20</sub> alkyl, substituted alkyl, C<sub>6</sub>-C<sub>11</sub> aryl, substituted aryl, C<sub>7</sub>-C<sub>11</sub> alkylaryl, C<sub>1</sub>-C<sub>20</sub> aminoalkyl, -(CH<sub>2</sub>)<sub>h</sub>COOM, -(CH<sub>2</sub>)<sub>h</sub>SO<sub>3</sub>M, CH<sub>2</sub>CH(OH)SO<sub>3</sub>M, -(CH<sub>2</sub>)<sub>h</sub>OSO<sub>3</sub>M,



-each R<sub>4</sub> is independently selected from the group consisting of H, C<sub>1</sub>-C<sub>22</sub> alkyl, C<sub>1</sub>-C<sub>22</sub> hydroxyalkyl, aryl and C<sub>7</sub>-C<sub>22</sub> alkylaryl;

-each R<sub>5</sub> is independently selected from the group consisting of C<sub>2</sub>-C<sub>8</sub> alkylene, C<sub>2</sub>-C<sub>8</sub> alkyl substituted alkylene; and

A is a compatible monovalent or di or polyvalent anion;

M is a compatible cation;

b = number necessary to balance the charge;

each x is independently from 3 to 1000;

each c is independently 0 or 1;

each h is independently from 1 to 8;

each q is independently from 0 to 6;

each n is independently from 1 to 20;

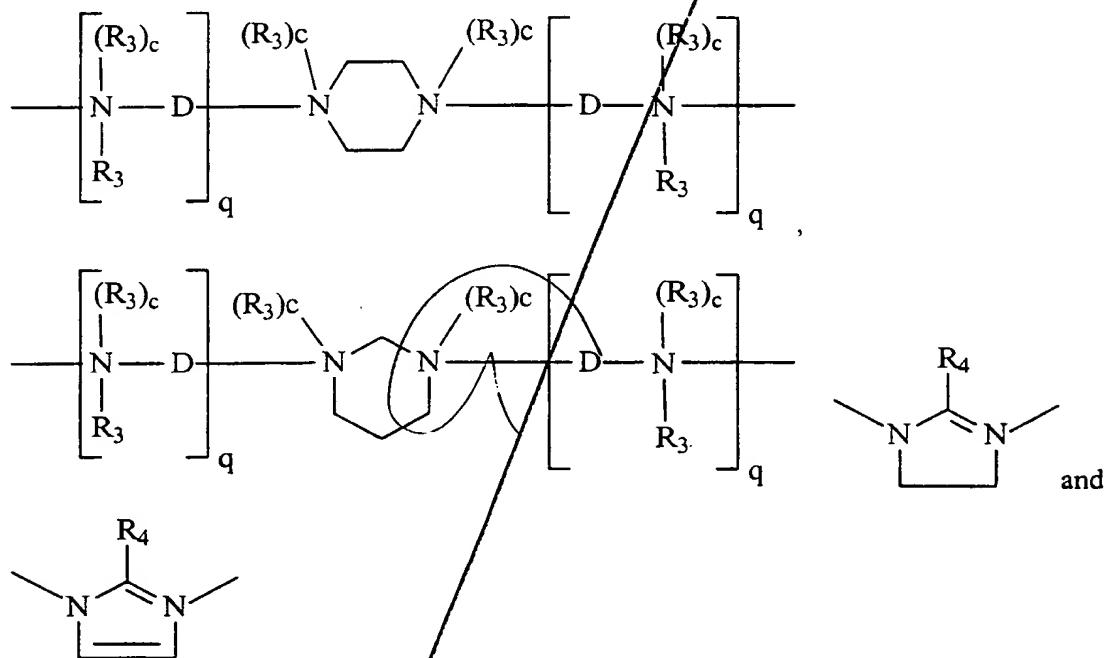
each r is independently from 0 to 20; and

each t is independently from 0 to 1.

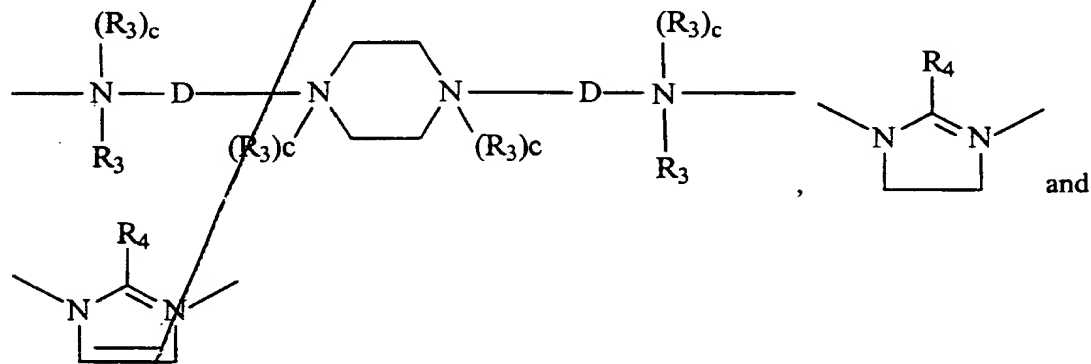
4. The detergent composition of any of claims 1-3, wherein the cyclic amine based polymers, oligomers or copolymers are adducts selected from the group consisting of piperazine,

piperadine, epichlorohydrin, epichlorohydrin benzyl quat, epichlorohydrin methyl quat, morpholine and mixtures thereof.

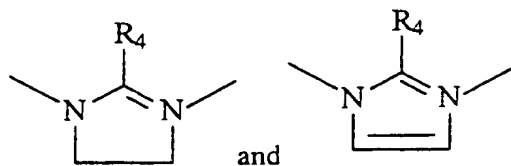
5. The detergent composition of any of claims 1-4, wherein each  $R_1$  is H and at least one W is selected from the group consisting of:



6. The detergent composition of any of claims 1-5, wherein each  $R_1$  is H and at least one W is selected from the group consisting of:



7. The detergent composition of any of claims 1-6, wherein each  $R_1$  is H and at least one W is selected from the group consisting of:



8. The detergent composition of any of claims 1-7, wherein each  $R_H$  is independently selected from the group consisting of  $C_5$ - $C_{20}$  alkyl,  $C_5$ - $C_7$  cycloalkyl,  $C_7$ - $C_{20}$  alkylaryl,  $C_7$ - $C_{20}$  arylalkyl, substituted alkyl, hydroxyalkyl,  $C_1$ - $C_{20}$  alkoxy-2-hydroxyalkyl,  $C_7$ - $C_{20}$  alkylaryloxy-2-hydroxyalkyl,  $(R_4)_2N$ -alkyl,  $(R_4)_2N$ -2-hydroxyalkyl,  $(R_4)_3N$ -alkyl,  $(R_4)_3N$ -2-hydroxyalkyl, and  $C_6$ - $C_{12}$  aryloxy-2-hydroxyalkyl.
9. The detergent composition of any of claims 1-8, wherein each  $R_H$  is independently selected from the group consisting of
- $$\begin{array}{c} \text{O} \quad \text{R}_5 \quad \text{O} \quad \text{R}_5 \\ \parallel \quad | \quad \parallel \quad | \\ -\text{C}-\text{CH}-\text{C}-\text{CH}_2 \\ \parallel \quad | \quad \parallel \quad | \\ \text{O} \quad \text{R}_5 \quad \text{O} \quad \text{R}_5 \\ \parallel \quad | \quad \parallel \quad | \\ -\text{C}-\text{CH}_2-\text{CH}-\text{C}-\text{OM}, \text{ and } -\text{C}-\text{CH}-\text{CH}_2-\text{C}-\text{OM} \end{array}$$
10. The detergent composition of any of claims 1-9, wherein the cellulosic based polymer or oligomer has an average molecular weight of from 5,000 to 2,000,000.

11. A laundry additive composition characterized by:

- a) from 1% to 80% by weight of water; and
- b) from 0.01% to 5.0%, preferably from 0.1% to 4.0%, by weight of a fabric enhancing component selected from the group consisting of cyclic amine based polymers, oligomers or copolymers, hydrophobically modified cellulosic based polymers or oligomers, and mixtures thereof; and

wherein the laundry additive composition is contained within an interior chamber of a container, the container further characterized by an exterior surface wherein the exterior surface contains a description of the composition characterized by language selected from the group consisting of: helps clothes look healthier, helps stop wear before it starts, maintains the appearance of clothes,

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helps prevent clothes from looking worn out, strengthens while it cleans for better looking clothes, strengthens threads so clothes look better, helps prevent clothes from looking worn, helps prevent wear and tear in the washer that can make clothes look old, helps keep clothes from aging, helps clothes come out of the washer looking as good as when they went in, helps preserve the fabric integrity of clothes, strengthens threads from the inside out for better looking clothes, extends the life of clothes, is like a vitamin for clothes, works like an anti-aging product on clothes, is like calcium for clothes, is like a supplement for clothes, after just 10 washes clothes look better than they would if you washed them other detergents, fortifies threads for healthier looking clothes, helps prevent clothes from looking old before their time, is like stopping time for your clothes so they stay looking good.

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